

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/740,600	LEUNG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Taghi T. Arani	2131	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/10/2004.
2. ☒ The allowed claim(s) is/are 48-66.
3. ☒ The drawings filed on 10 December 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
**AYAZ SHEIKH**  
 SUPERVISORY PATENT EXAMINER  
 TECHNOLOGY CENTER 2100

### **DETAILED ACTION**

1. Claims 48-66 have been examined.

#### **Examiner's Statement of Reasons for Allowance**

2. Claims 46-66 allowed over prior art.

The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**As per claim 48** (an example of broader claim), none of the prior art of record, either taken by itself or in any combination, would have anticipated or made obvious the invention of the present application at or before the time it was filed. The subject matter regarded as allowable by the examiner is:

"during execution of the class constructor for the second class, attempting by the second

class to verify a digital signature on the codebase for the first class;

in response to a successful verification of the digital signature on the codebase for the first class, successfully completing the instantiation of the second class;

in response to successfully completing the instantiation of the second class, determining by the first class a codebase for the second class;

in response to determining by the first class the codebase for the second class, attempting by the first class to verify a digital signature on the codebase for the second class; and

in response to a successful verification of the digital signature on the codebase for the second class, performing the call from the instance of the first class to the instance of the second class.”

Claims 54 is an apparatus and claim 61 is a computer program product corresponding to claim 48.

Claims 49-53,55-60,62-66 are also allowed by virtue of their dependencies.

### **Conclusion**

3. Prior arts made of record, not relied upon:

US 6,192, 476 is directed to a method and system for determining whether a principal (e.g. a thread) may access a particular resource. According to one aspect of the invention, the access authorization determination takes into account the sources of the code on the call stack of the principal at the time the access is desired. Because the source of the code on the call stack will vary over time, so will the access rights of the principal. Thus, when a request for an action is made by a thread, a determination is made of whether the action is authorized based on permissions associated with routines in a calling hierarchy associated with the thread. The determination of whether a request is authorized is based on a determination of whether at least one permission associated with each routine encompasses the permission required to perform the requested action. Support for "privileged" routines is also provided. When a routine in the calling hierarchy

is privileged, the determination of whether an action is authorized is made by determining whether at least one permission associated with each routine between and including the privileged routine and a second routine in the calling hierarchy encompasses the permission required to perform the requested action.

**US 6,226,746** discloses a system obtaining the security requirements for an action requested by a thread executing on a computer. The thread invokes a plurality of methods during its execution. The system includes a call stack and a determination unit. The call stack stores an identifier and security requirements for each of the methods in the order that the methods were invoked by the thread. The determination unit combines the method security requirements from the call stack to obtain the security requirements for the requested action. a class signature interface exposes members of an object class in an object oriented software system by exposing access information to the member.

**US 6, 157,960** is directed to an automatic object distribution which allows object oriented programs to be run as distributed programs without any explicit networking code, and without using an interface definition language (IDL). The invention allows programmers to experiment with different distributions without complicating the programming task. It accomplishes this by generating two proxies that allow method calls written for local invocation to be invoked over a network. These dynamically-generated proxies allow calls to flow across a network as if they were local.

**US 6,615,350** teaches an apparatus, system, and method to provide an initial and an on-going authentication mechanism with which two executable entities may unilaterally or bilaterally authenticate the identity, origin, and integrity of each other. In

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one instance, the authentication mechanisms are implemented within a dynamically loaded, modular, cryptographic system. The initial authentication mechanism may include digitally signed challenge and possibly encrypted response constructs that are alternately passed between the authenticating and authenticated executable entities. A chain of certificates signed and verified with the use of asymmetric key pairs may also be part of the initial authentication mechanism. Representative asymmetric key pairs include a run-time key pair, a per-instance key pair, and a certifying authority master key pair. The on-going authentication mechanism may include nonce variable having a state associated therewith. The state may be both time and incidence varyin and may be combined in an obfuscating or encrypted manner into data passed between the executable entities. The initial and ongoing authentication mechanisms may have instances implemented without the use of export-regulated cryptography.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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